

INTRODUCTION

The Delaware Department of Transportation (DelDOT) has developed this Construction Manual to provide guidance and assistance to Department personnel in the practice and procedure for all construction related to highways as authorized by the State Legislature. This Construction Manual documents Department policies and prescribes procedures for new highway construction and highway improvements. This Manual is directed primarily to Department construction personnel and consultant inspectors retained under agreement by the Department.

The Construction Manual consists of the following ten parts:

- Part A - Department Organization:** provides an overview of the Department and the responsibilities of some of the divisions that make up the Department.
- Part B - Contract Administration:** describes the different parts of the Contract and provides information on the responsibilities of the inspector regarding contract administration.
- Part C - Office Practices and Procedures:** describes the field office, the district office, and the inspector's role in maintaining records for construction projects.
- Part D - Field Practices and Procedures:** describes general record keeping and inspection procedures to be used throughout the duration of construction projects.
- Part E - Standard Construction Procedures:** describes, in conjunction with the Standard Specifications, the different aspects of construction, and gives explanations of the contractor's work, inspection procedures, and general hints about conducting successful field operations.
- Part F - Special Construction Procedures:** describes, in conjunction with the Special Provisions, the different aspects of construction, and gives explanations of specific items of the contractor's work, inspection procedures, and general hints about conducting successful field operations.
- Part G - Construction Equipment:** describes many of the most commonly used types of construction equipment, giving both general features of operation and information specific to inspection of the equipment and of the work performed using the equipment.
- Part H - Standard Forms:** provides examples of many of the forms inspectors will encounter during a construction project.
- Part I - Glossary:** provides definitions and explanations of most of the construction terms that appear in the Manual or are used in the field.
- Part J - Appendices:** contains english/metric conversion charts, the most commonly used mathematical formulae used in field inspection work and other useful references such as information regarding the Federal Highway Administration (FHWA).

The Manual is intended to be used with the Specifications and its supplements. Therefore, numerous references to the Specifications have been included in the Manual. These references are annotated in brackets at the end of the sentence or paragraph to which they refer. For example, in Subsection B1.01, the Inspector is referred to several subsections of the Specifications, including 101.83 and 101.87. These references look like this: **[101.83] [101.87]**. Using this Construction Manual and these references, inspectors will be able to better understand the requirements of the Contract and what they must do to ensure those requirements are met. Revisions to the Manual will be made periodically by the Quality Section. Revised pages will replace existing pages in the Manual so that the Manual will be current.

In several places throughout this Manual, the reader will find a shaded text box entitled Historical Perspective. These passages contain references to construction techniques that are no longer used. Because of their unique nature and historical significance in the development of construction engineering, these insights into the construction methods of yesterday from older construction manuals have been preserved in this Manual.